

## ABSTRACT

Disclosed is a method for detecting STI void of a semiconductor wafer. The method of  
5 the present invention comprises steps of assigning a detecting area in a predetermined region  
of the wafer; forming active areas and gate strips crossing the active areas by the process  
synchronized with that for other regions of the wafer. Dielectric material is filled between the  
active areas. The adjacent portion between the active areas reaches a predetermined length at  
least. The electrical value of the gate strips is measured to determine whether there is any void  
10 in the dielectric filled between the active areas, thereby to derive whether there is any void  
generated in the STI between the active areas of the other regions of the wafer.